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ABSTRACT

This study examined the decision-making processes of preschool teachers in creating developmentally appropriate practices. Five teachers of 4-year-old children in 3 private schools participated; these teachers' classrooms scored high on both the Early Childhood Environment Rating Scale and the Classroom Practices Inventory. A model of preschool teachers' decision making process was developed, consisting of three components: classroom situation, judgment, and the curriculum. Findings, including examples of teachers' thought processes, indicated that the quality of the curriculum is affected by teachers' making sense of the classroom situation, and their judgment of what is good for the children's education. Knowledge and experience are significantly related to what teachers think is good for children. The findings highlighted several issues pertaining to developmentally appropriate decision making, including: the use of knowledge about child development and learning, the notion of readiness, level of teacher involvement, source of knowledge of individual children, working with children with special needs, and insufficient knowledge about children's social and cultural contexts. Recommendations based on the study's findings include changes in teacher education and training programs. (JPB)

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Creating Developmentally Appropriate Curricula: Preschool Teachers' Decision-making Processes

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ABSTRACT

The purpose of this study is to understand the decision-making processes of preschool teachers in creating developmentally appropriate practices. Five teachers of 4-year-old children in three private preschools participated in this study. They all had more than five years of teaching experience, had gone through the NAEYC accreditation procedure, and were recognized by the local director for successfully carrying out developmentally appropriate curriculum. The classrooms created by these teachers scored high on both the Early Childhood Environment Rating Scale (ECERS) and the Classroom Practices Inventory (CPI).

The major data sources were the transcripts of interviews supplemented by field notes from participant observation and documents of curriculum practice. A model of preschool teachers' decision-making processes was developed based on what was learned from these five teachers. The model composes three major components: classroom situation, judgment, and the curriculum. The quality of curriculum is affected by teachers' making sense of classroom situation, and their judgment of the good for the education of young children. Knowledge and experience are significantly related to what the teachers think as good for children. Episodes of teacher thought processes are presented as invitations to readers to engage in discussion about the making and evaluation of developmentally appropriate practices.

Several significant issues are discussed, including: the use of knowledge about child development and learning, the notion of readiness, level of teacher involvement, source of knowledge of individual children, working with children with special needs, insufficient knowledge about children's social and culture contexts.

Based on the findings, changes in teacher education and professional training programs are called for. Among those suggestions are an alternative for teaching curriculum, an emphasis on reflection of personal experience, and the learning about both how and why. The findings also suggest further studies to search for knowledge of the social and cultural contexts, and to develop procedures for authentic evaluation of DAP.

Creating Developmentally Appropriate Curricula: Preschool Teachers' Decision-making Processes

For a decade, many early childhood professionals have made every effort to advocate developmentally appropriate practices, yet studies indicate that developmentally appropriate programs are not a norm in practice (e.g., Dunn & Kontos, 1997). One possible reason, frequently mentioned, is inadequate understanding of the meaning of developmentally appropriate practice. Wein (1995), for example, asserts that teachers were sometimes unfamiliar not only with the concepts of developmentally appropriate practice but with the performance skills or scripts for action to put it into practice (p. 19). This statement suggests that if teachers learn about sets of skills or scripts, they can make better use of developmentally appropriate practice in the classroom. Support for this assertion is found in studies (e.g., Cassidy et al., 1995; Shuster, 1995; Snider, 1990) which indicate that teachers' implementation of developmentally appropriate practices improved after they had gone through specified training programs.

There is evidence, however, teachers do not actually implement developmentally appropriate practice, even though they were trained and had asserted that they believed in developmentally appropriate practice. The discrepancy between teachers' DAP beliefs and practices is repeatedly reported by researchers (e.g., Bleeker, 1992; Charlesworth et al., 1991, 1993; Lu, 1993). A common interpretation of this phenomenon is that, again, teachers did not fully grasp what developmentally appropriate practice means.

Yet there are reasons not to be pessimistic about the low implementation rate and the discrepancy between what teachers say they believe about DAP and what actually do in the classroom. When DAP is the focus of inquiry, researchers tend to apply general standards and specific activities labeled as DAP to measure classroom practice. Several tools (e.g., Charlesworth et al., 1993; Hyson et al., 1990) have been developed for research purposes according to the original DAP guidelines. These instruments have been

used broadly to describe the relationship between teachers' DAP beliefs and practice; however, do we use the right "lantern" (van Manen, 1990) to search for the right thing? Is developmentally appropriate practice something concrete and simple that can be identified during a short visit? Are these instruments able to describe the complexities of teachers' thinking and actions within various contexts? Do these tools help us understand the interactive relationship between DAP beliefs and practice? A question that needs to be addressed is whether teachers have the same image of developmentally appropriate practice as the researchers do. Although many early childhood professionals have engaged in private and public conversations regarding DAP, do all participants in these conversations share similar meanings?

Fortunately, the revised guidelines for DAP (Bredekamp & Copple, 1997) are another research force for turning our attention to teachers' decision-making processes. Rather than viewing the DAP as a set of prescriptive curricular principles, the new document emphasizes the critical role of teachers in making decisions about what constitutes the best education for children in their classroom. Therefore, it is impossible to evaluate the appropriateness of classroom practices without looking into teachers' thinking processes.

Based on a study of five preschool teachers' thinking and making of developmentally appropriate practice, this paper develops a model to describe their decision-making processes. Episodes of teacher thought processes are presented as invitations to readers to engage in discussion about the implementation of developmentally appropriate practice (DAP) from the insiders' perspectives.

Methods

By use of interpretive mode of inquiry, this study takes an ethnographical approach to collect stories of preschool teachers' curriculum making. In-depth interviews were used as a primary inquiry method to gather the meanings of the curriculum and the

thought processes that went into development. During the course of this study, the researcher participated in the school setting as a teacher aide and a participant-observer. The major task as participant-observer is to carefully and holistically experience, and consciously record in detail the many aspects of a situation, and yet at the same time, analyze continuously the researcher observations for meaning (Glesne & Peshkin, 1992).

In addition to working closely with the teachers, the researcher collected documents that related to the question: How does the teacher enact a curriculum for a specific group of preschoolers in a specific context? The collection of documents provides evidence of classroom activities that reveal the teachers' curriculum thoughts, planning, and implementation. These documents include written plans, photographs of classroom activities, newsletters for parents, and, when available, some teacher self-recorded documents (e.g., journal writing, plan notes).

Data Source

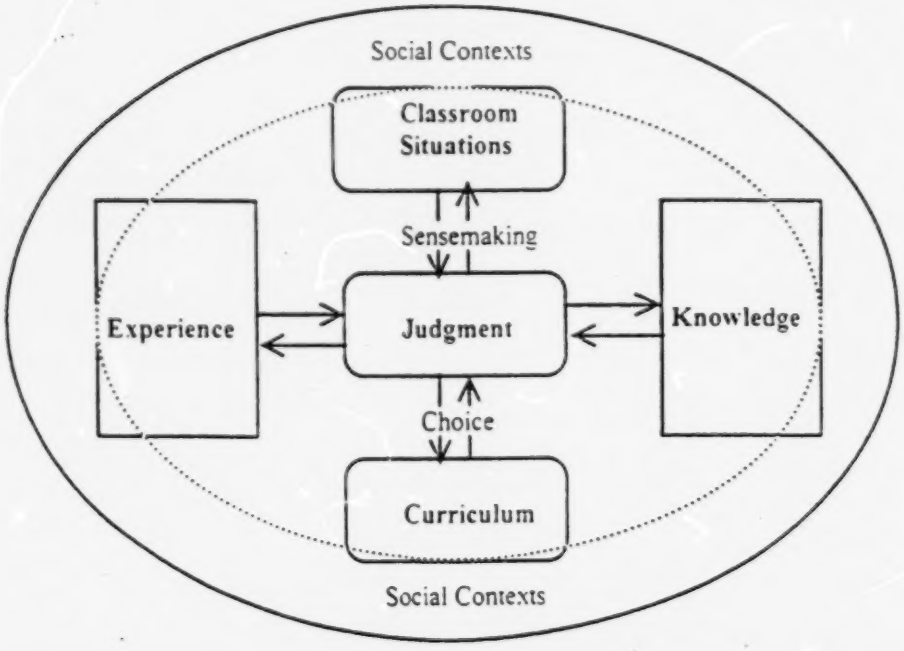
Five teachers of 4-year-old children in this study were in three schools that were accredited by the National Association for the Education of Young Children (NAEYC) in the mid-Atlantic area. All of them have more than five-year teaching experience and are highly respected by administrators, parents, and colleagues, as well as recommended by university faculty.

The fieldwork of this study took place from November 1996 to March 1997. During this period, teachers were interviewed, formally and informally, and visits were made to each classroom once a week for a total of 12 to 15 visits. All formal interviews were audio taped and transcribed. Informal interviews were chronicled in the researchers' field notes. The major data sources consisted of transcriptions of interviews and field notes of participant observation, as well as documents relating to teachers' curriculum planning and practices.

A Model of Preschool Teachers' Decision-making Processes

A model of the decision-making processes in Figure 1 offers a view of the thinking processes of these preschool teachers when they are engaged in creating a developmentally appropriate curriculum. Embodied in the social contexts, this model consists of five components: situation, knowledge, experience, judgment, and curriculum. Classroom situations and curriculum are reciprocally connected through teachers' judgment of children's needs and interests based on their knowledge and experience. Assumptions, components, and the relationships among these components are described in the following sections.

Figure 1: A model of preschool teachers' decision-making processes



Note: The model is embodied in the social contexts; however, the social contexts are not explicated in this model because the social contexts are not included significantly in the studied teachers' curriculum-making discourse.

Three Components

Classroom situations. The first component involved in the curriculum-making processes is the classroom situation. As Connelly and Clandinin (1988) assert, curriculum is something experienced in situation (p. 6). A developmentally appropriate curriculum can be viewed as what is experienced by the teachers and the children. It refers to the dynamic interaction among persons, things, and processes at any point in time. Teachers' curricular decisions, therefore, are situated.

Specifically, whether a curricular decision is developmentally appropriate should be examined in its given situation. Moreover, there is a time dimension in classroom situations. What is happening in one classroom now is related to what has happened before and will change what is going to happen next. When looking into teachers' decision-making under certain situations, we need to take its history into account (Connelly & Clandinin, 1988).

Because the composition of the class is varied, group dynamics differ from one classroom to another. The school and the community also contribute to some of the variance. In addition, the characteristics and experiences of the teacher may turn a classroom to another facet. Through a close examination of teachers_ thinking for DAP, the complexity of the situations plays an important role in influencing teachers' curricular decisions. Before discussing the appropriateness of teachers_ curriculum making, it is necessary to know how the teachers interpret the situations they are in. An activity that works well in one classroom may not succeed in another. What is appropriate for children is determined by knowledge not only of child development and learning, but also of the classroom situations. The following is an example of how situations affect teachers' curricular decisions.

Assumptions

This model is based on several assumptions: first, teachers are professionals, who make conscious educational decisions according to their professional knowledge. According to Vygotsky's higher order psychological process, teachers are able to use informed awareness and deliberative thought processes and react sensitively to classroom events (Manning & Payne, 1993). This model analyzes only the purposive and meaningful thinking of teachers in classroom practice and does not include curricular decisions that are made instinctively.

Second, teachers are persons who bring their personal history into teaching. This model views teachers' personal experience as an important channel to their curricular decisions. Third, teaching is a social activity. To some degree, teachers' decisions reflect the values of the society they belong to. A close examination of teachers' classroom practice may reveal some of the social and cultural values that affect the teachers.

Wilcox (1982) and Cornbleth's (1990) concept of curriculum in context suggests that the classroom is embedded within the multiple layers of the social and cultural environment. Teachers' perspectives and teaching were shaped not only by their personal characteristics, dispositions and abilities, but also by school organizational controls and cultures. It reminds us that the implementation of DAP is related to the multiple layers of social and cultural contexts. Therefore, when talking about teachers' DAP making, the social and cultural constraints need to be considered, such factors as social values and the school policy. Given the social context of the schools, this model zooms in on teachers' thought processes in the inner layer of the social contexts -- the classroom. The outer layers of the social contexts of the school are not developed in this model because my focus is primarily on teachers' judgments and I am following the ideas of the teachers who did not often include social contexts in their discourse.

The Sand Table in Different Classroom Situations

Amy brought a large bucket of seeds into the classroom to the sand table. Children really enjoyed playing with it, such as pouring and feeling it. Amy described what interesting things children did at the bird seed table:

> Lately, a little boy was very interested in pumpkin pie. We have pie pans, and so they spent all morning filling it up, and cooking it, and, you know, they were cooking pie, pouring it out, and did some good things. (AL, 12/05/96, p. 8)

Similarly, Margaret filled the sand table with seeds and beans. She expected to see some wonderful play at the seed-and-bean table. Unexpectedly, the children displayed crazy play behavior. For instance, they put their hands into it, moving back and forth very quickly. The beans and seeds went flying everywhere in the room. "It was fun to feel it that way," Margaret thought, "but, it also messes up the room."

> When Joseph gets near those beans, they begin to go everywhere. When Daniel gets at those beans, we get a lot of this sort of throwing . . . They could sweep it all up to one end and not allow someone else to have the other end. It became a different kind of play than what we anticipated. It did not work. (MA, 03/04/97, p. 8)

Margaret's understanding is "to have a table here kids can just work back and forth [which] is supposed to be centering, and calming, and also exploring, to see if I do this, what will happen kind of thing" (MA, 03/04/97, p. 8). But, according to Margaret's account, it is the composition of the children this year that made the seed-and-bean table not work. Finally they decided to move the table out of their classroom.

The example of the sand table episode indicates that a so-called "developmentally appropriate activity" may not be appropriate in all situations. The appropriateness of an curricular activity is determined by the situation applied. When we evaluate a classroom, it is necessary to take classroom situations into account.

Judgment. The second component of this model is the judgment that comes after the teachers have made sense of the situations and before the making of choices. After interpreting the situations, teachers make judgments about what action to take. From Aristotle's (1962)

perspective, human action, called "practical action," usually involves "practical judgment" -- true and reasoned disposition toward action with regard to things good and bad for men (*Nic Ethics*, 1140b, cited by Grundy, 1987, p. 62).

"Practical judgment," according to Grundy (1987), comes from the Greek word, *phronesis*, consisting of three components: knowledge, judgment, and taste. Knowledge, formed on the basis of *phronesis*, is owned by the actor "who knows when to apply and when to refrain from the application of the full rigor of the law in order that justice may be served . Taste means a special way of knowing—dealing with what is 'fitting' on a particular occasion (Grundy, 1987). She explains:

> In practical action, a person deliberates and makes choices. Knowledge, judgment, and taste combine to produce discernment. This kind of action, resulting from practical judgment, is guided by "the good" -- what is truly good for children. It should be evaluated on its own terms rather than by the degree to which it implements a particular "idea" (Grundy, 1987, p. 62).

Prior studies on the implementation of DAP seem to take the NAEYC guidelines as a set of predescribed activities to be directly applied to practice. This kind of evaluation ignores the judgment of the teachers. The concept of "practical judgment" and "the good" sheds light on the development of developmentally appropriate curricula. When teachers are "informed by practical judgment," (Grundy, 1987, p. 63), they are concerned with the appropriate opportunities for learning in the classroom environment. They are encouraged to "act in a certain situation to break a rule or convention if he/she judged that to act in accordance with it would not promote the good, either generally or of the persons involved in the specific situation" (Grundy, 1987, p. 62).

Actions that are taken by the teachers according to their understanding of the local situations might not be evaluated as developmentally appropriate by the evaluators. For example, to separate a child from other children in the classroom may not be appropriate for most of the children, but may be appropriate when the teacher knows that this

particular child needs to be alone when he or she tries to gather himself or herself. It is possible that a lack of communication between the teachers and the evaluators contributes to the reports of low implementation of DAP and a discrepancy between teachers' educational beliefs and practices.

"The good," in this model, refers to what teachers determine as the needs and interests of children when they make judgments regarding what is appropriate for the child. Teachers' judgments about what is good for the children are significant in the interviews with each teacher. Examples of teachers' judgments of children's needs and interests are provided later in this paper. The following example shows the thinking processes that one teacher went through when she adapted other teachers' ideas into her own teaching.

The Judgment Involved in Adapting an Activity

Since there is a wonderful science teacher in the school, Florence tended to provide different kinds of science learning experiences in the classroom instead of repeating what had been taught. Gradually, she has been additionally trying more and more to repeat and adopt what the science teacher did in the classroom. For example, she repeated a magnet activity in her classroom and made some changes. What judgment Florence made when she adopting this activity?

Judgment	Action
Children this age need to do it over and over again.	To repeat the magnet activity and make it possible for the children to come and go, and do it for a long time if they want
It was time to make a change!	The magnet table is used to replace the hot plate drawing – drawing with crayon and placing the paper on a hot plate produces a magical effect on the paper
To allow two children at a time to engage in an activity because it is a very safe way to be with one other child. "There's no pressure, but you can share ideas."	To maintain a little table with two chairs; to make the magnet game a two-person activity

This group of children needs direction.	To set up a guided process for conducting this magnet activity.
I don't want to give the children the idea that we can just lose things, so I had the idea of	To put little pictures on the table as a home for the magnets.
To catch the child's idea through observations of children at play—"John remembered the way they did it in science..."	To modify her plan based on her observation and interaction with children at play
The children have already had guided lessons with the materials, so I think it's fun to give them some mysterious things and let them figure those out.	To add some new items in the tray.
not to water down the children's interests.	To be careful to not put any metal in that a magnet wouldn't stick to.

During the course of two children's playing with magnets, three children stood around them and gave ideas by saying, "Try this, try that." It seemed that many children were interested in this activity. Florence interpreted it as follows:

> Because there's only two magnets, those two children are still in charge, but the other children.... I think, um, when they remember an activity and it comes back, you know, it's...they're...they're very excited because they have memories to build on. They remember it won't stick to cloth, but they're not sure about this, you know. So I think they're very eager to get into it. I'll be interested to see how long the interest lasts. (FL, 02/18/97, p. 2)

The example of thinking in adapting an activity illustrates teacher's judgment about what is good for the children. The good that guides Florence's decision includes (1) children need time to practice what has been learned; (2) children in her classroom needed time and space to be with only a few children; and (3) a need to advance the children's experiences. By observing children closely, the teacher confirms or modifies her judgments.

Curriculum. Every teacher has her/his own version of developmentally appropriate curriculum. Among those foci of DAP, however, several elements are

perceived profoundly by the participating teachers. For example, teachers perceive the importance of understanding children's development, moving children up their individual developmental levels, allowing children to learn through hands-on experience, establishing a positive and supportive climate, creating a child-centered environment, providing opportunities and choices, encouraging learning through process, and engaging in children's learning.

A close observation of the five classrooms reveals several common characteristics, including a free-exploration environment, a caring environment, a non-authoritative environment, and a thoughtfully created environment. Episodes of curricula made by the teachers will be described later in this paper.

Although teachers are attentive to children's learning, they hold different perspectives from which to decide when and how to be involved in children's play. The degree to which guidance is given and the extent to which teachers are involved in children's learning process varied from one teacher to another. Taking into account of Vygotsky's (1978) concept of the Zones of Proximal Development and what Rogoff (1990) described as "guided participation", that the levels of participation of the teacher in children's learning process is another issue that needs further studies.

The Thinking Processes of Making Developmentally Appropriate Practice

Making sense of the situations. The making of developmentally appropriate practice is a interactive thinking and acting process in situations. Teachers' interpretation of the situations affects their judgment of what are right actions to take. According to the paradigm of hermeneutic interpretation, human decisions are usually made on the basis of meaning making through an act of interpretation. Avoid simply claiming that knowledge and rule application is a sufficient basis for action, hermeneutics reminds us of the importance of making decisions about both the meaning of the rules and the situation in which they are to be applied before action is taken (Grundy, 1987, p. 59). Preschool

teachers' decisions regarding what is the best education for children are based upon "interpretive judgments" -- human reason as a basis for decision making (Grundy, 1987). Making sense of the situations is a required step in decision-making.

Factors that affect teachers' judgments. Teachers' judgments of the needs and interests of the children are grounded in their professional knowledge and personal experience.

Knowledge. According to the revised guidelines (1997), three domains of knowledge are useful for creating a developmentally appropriate curriculum: knowledge of child development and learning, knowledge of individual children, and knowledge of the social and cultural contexts. An examination of how teachers use their professional knowledge in the three domains to make judgments of the good opens an door to the understanding of the different versions of DAP in practice.

Experience. In this model, experience refers to teachers' learning and teaching experiences and those of their personal experiences that relate to their teaching. Based on the concept of teachers as curriculum makers, any effort to understand the meaning of curriculum must examine how the curriculum is shaped by teachers' personal experiences (Connelly & Clandinin, 1988). Teachers' personal learning and teaching experiences formulate personal theories, beliefs and values regarding what is good for the children.

A reciprocal, dynamic interaction in the model. Within the uniqueness of the teaching context of each classroom, the decision-making processes involve teachers' making sense of the situations, making judgments, and making choices. They are informed by teachers' knowledge and experience, and may be either supported or constrained by the social contexts.

Classroom situations and curriculum are interrelated with a reciprocal relationship. What has been created by the teachers becomes part of the experience of both the children and the teachers, thus shaping the classroom situations. Specifically, teachers'

development of a curriculum begins with their interpretation of the classroom situations, making sense of the situations, thinking about what is best for children in terms of children's needs and interests, making judgments and choices, finally creating a curriculum.

Situations, teacher experience, teacher knowledge, and classroom situations are not static, but in constant flux. For example, teachers may attend workshops to acquire new knowledge, then try it, which in turn gives them new insights into what does or does not work in the classroom. In the course of teaching, many changes occur, and the flow of teachers' curriculum making is interrupted. Changes in school policy, classroom setup, children, or staff also have effects on classroom practice. In this particular analysis of teachers' curriculum making, however, it can only present a few snapshots of dynamic classroom practice.

The model laid out earlier presents five components that relate to the decision-making for DAP. The thinking process consists of a series of complicated conversation in the teachers' minds. The following section portraits teachers' judgment of the needs and interests of children, drawing upon three domains of knowledge.

Significant Themes in Creating Developmentally Appropriate Practice

The Good – Children's Needs and Interests

The NAEYC's DAP guidelines suggest that early childhood curriculum be fitted to the needs of children rather than be based on expecting children to adjust to the demands of specific programs (Bredekamp, 1987). The information about the learner is an important source of curriculum objectives when a curriculum is being planned, for example, in the Tyler Rationale (Tyler, 1949). Tyler (1949) declares that the examination of students' needs and interests should be compared to standards of "normal" or "good" before being adopted as objectives for the curriculum (Kessler & Swadener, 1992). "This difference or gap is what is generally referred to as a need.... Need in this sense is

the gap between what is and what should be (Tyler, 1949, p. 8)".

When talking about the needs of a child, a number of different types of needs can be distinguished, such as biological needs, psychological needs, and functional needs (Hamm, 1989). In addition to satisfying the needs of the child, schools also take social needs into account. In considering the school's cultural transition function, Hamm (1989) views two types of functional needs as being of major concern in the school. One such set of needs concerns the standards set in the community to which children are eventually expected to conform. Other standards vary from individual to individual, depending on their role and occupation in society:

> It is a reasonable demand to expect the school to cater to some extent to these needs. And it is certainly a legitimate expectation that the school satisfy those other functional needs that can be considered the immediate pre-conditions for obtaining an education. (Hamm, 1989, p.80)

A model of needs, wants and interests in education is proposed by Hamm (1989). In his model, only when children's actual needs are consistent with their "felt needs" -- what the children want to learn -- will there be no motivational problem in teaching. If the actual needs of the child, however, are at odds with the child's wants or "felt needs," then the teachers' appeal to the children's needs will not get the children to be either more attentive or more interested in what they should learn. Because children are not always aware of what they need or are not always interested in what they should learn, the emphasis of a curriculum on the needs of the child, from Hamm's point of view, may not be suitable to solve the problem of motivation in education.

Similarly, the guidelines assume that "if learning is relevant for children, they are more likely to persist with a task and be motivated to learn more (p.53)". According to Hamm's model, teachers sometimes have to face the problems of motivation when the children do not feel the needs that teachers have discovered from their analysis of the child's development and the social contexts. The implementation of a child-centered curriculum, or the DAP, does not ensure that there will be no motivation problems. The

teachers, therefore, need to learn how to make judgments of appropriateness for children and, in the meantime, make the needs approval for the children. Only when what teachers think are actual needs of the child become the "felt needs" of that child, will more self-motivated or more self-initiated learning occur in the classroom.

Children's needs, in this study, are referred to those needs identified by the teachers, either according to their understanding of child development or a norm of the society. On the other hand, children's interests, similar to what Hamm called "wants," are known through children's initiated activities. Children's needs and interests sometimes overlap. For instance, when a teacher says, "Children need to play," he/she may mean that play is a need for children's learning and development; she may also mean, however, that children are interested in play. This study pays attention to two types of children's interests: those that are encouraged and those that are not encouraged or allowed to develop in the classroom.

Tension between children's interests and needs. Sometimes children are interested in things that teachers hesitate to incorporate into the curriculum. For example, many teachers are not willing to do "Police Station" because of their concern with fighting and gunplay. The episode followed indicates two different thinking processes of two experienced teachers.

Police Station

Margaret has tried to let children decide what centers they want to have in the housekeeping area; however, she focuses on a couple of choices or a couple of suggested ideas. Many children like the topic of police station, but, from Margaret's point of view, the Police Station is not appropriate for 4-years olds. She said:

> For three-year olds, it's different. They just want it. You can set up one of those climbing things. They will just climb it out and put it on head or go to sleep or answer the phone. But four-year olds are able to take that play and move it further. They want more action. (MA, 11/26/96, p. 3)

Similarly, Florence found that the children in her classroom were interested in playing Police Station. At first, she provided some props for their play but she found that the children focused entirely on pretending to shoot and fight. She began to think about what was really important for children to learn about police. Her way of dealing with the issue shows how preschool teachers accommodate themselves to children's interests:

> I worked it through in my own mind. I say, okay, uh, this is not so great. This is not friendly play in my classroom. What do these children need to learn about the police? So they need to learn that police are there to help people.

Since Florence thought through the value of learning about police, she decided to be involved in the children's play to guide their learning. She read stories about police who helped people solve problems and also played with children in situations that needed the police's help, such as getting lost. She emphasized that police officers do not want to shoot people; they want to catch them and stop them from doing bad things. After the children had some knowledge of police, they wrote a story about police together:

> Somebody saw a ghost. It was a bad ghost. They called 911. [We teach them the numbers 911.] The police came. The police caught the ghost. They put the ghost in jail. They had to feed [this is what we taught them, too. If you have someone in jail, you have to take care of them.] What do they want to eat? They said, "Phyllis, what do you want to eat?" The ghost said, "Potato chips." (FL, 12/06/97, p. 16)

At the end, children still liked to put people in jail, but Florence was happy that children knew more than they did before. When she reflected on what she had done, she was happy that she had allowed children to play as they wished and also found an appropriate way to be involved and teach.

Teachers may decide to do something else when they do not like what children are interested in. In this case, however, Florence was pushing herself to explore it because "it is something that the children enjoy, want to play."

> I sort of made myself do it because it was important to the kids, and that I had to sort of make it work, so that I could become comfortable with it, and it was a lot of work for me. I always had to be back at the pretend corner, I always had to be watching how they were playing, you know, I couldn't relax. (FL, 01/30/97, p. 12)

Putting children's interests as a priority, Florence worked made it something that she was happy with and the children enjoyed as well. She said, "It's good to stretch yourself, because then you have to say, 'What do I want children to understand about this?' It is the time when meaningful teaching happens."

Another case significant in the issue of the conflict between needs and interests is playing pets. Children playing pets or animals is common in preschool. For some teachers, playing pets seem to be a nice learning experience for children's cognitive and emotional development. For other teachers, it may be a distraction and is prohibited in their classrooms. The following are the different judgments teachers made concerning children's playing pets.

Playing Pets

Based on the children's interests in playing dogs and cats, Amy decided to arrange a field trip to a pet store. They discussed how to take care of pets and played games about dogs and cats. In an indoor playroom, she engaged in a pretend play about a pet store initiated by the children. Amy thought the play was good for the children:

> I think acting out something, it's kind of how they learn. You know, like how to care for a pet. I think mostly they just enjoy pretending. And the more they know, the more they elaborate their play. Sometimes, watching them pretend, you can see who really has pets and knows about them. (AL, 01/14/97, p. 7)

On the other hand, Margaret suggested that the children play something else when she saw children playing dogs and cats. What are Margaret's concerns that drew this decision?

> One year, Margaret had a girl who always played a pet at home with her two older sisters. At the beginning of the year when she was in the class, she always looked like an animal. Without using a word, she could convince Margaret of everything. She liked to use only her face to express requests and emotions. Margaret wanted her to learn the use of language, rather than animal sounds and expressions. Therefore, she discouraged the children from playing pets in the classroom. Out of regard for the children's interests, she reserved the pet play for outside or home.

A couple of years ago, she decided to tell all the children "No [playing] animals in the classroom." Her reasoning was as follows:

> Because a bunch of children who just wanted to be animals in housekeeping all day long eating food and lying on floor and.... We don't think that they were modeling any kind of higher cognitive concepts or even social kinds of things because some one was being driven around. I was not pretty comfortable for that. (MA, 11/26/96, p. 4)

Again, teachers' decisions about whether to incorporate playing pets into the curriculum is situated in the classrooms and results from teachers' judgment of children's needs and interests. A divergence between teachers' perceptions of children's needs and interests increases the difficulty of curriculum making, so that teachers, like Margaret, converse with other teachers and self to come up with a better decision.

Knowledge of Child Development and Learning

To help create a curriculum, teachers draw on their knowledge of child development and learning to identify the needs and interests of the children. Not only do they exploit this area of knowledge to set up goals for individual children, they also use the knowledge as a norm to diagnose the children's individual differences. For example, a teacher may discern a language problem or delay in fine motor skills. On the basis of their knowledge of child development and learning, teachers express confidence that they will find appropriate activities for the children. As Margaret says, "I am extremely clear about what I feel is appropriate for kids to do (MA, 12/10/96, p. 1)."

Furthermore, this body of knowledge also helps teachers communicate with parents about goals and needs for their children. In the Grace Nursery School, for example, teachers discuss a variety of developmental areas with parents, including motor,

social, cognitive, language, emotional development, and health. When parents bring up concerns, the teachers are often in a position to assure the parents that there is no great cause for worry because "these are developmental things" (Field note, 01/06/97).

Age difference. Age difference is a basic consideration in a developmentally appropriate curriculum. Since teaching a mixed-age group was new for Amy, she tried to figure out how to deal with the different needs of children at different age levels. In her talking and thinking about curriculum making, she tended to compare the differences between the older and younger children in her class. For instance, she said, "The older ones, they have a more definite idea, and they know what they need. . . the younger ones need different kinds of things (AL, 01/02/97, p. 10)." When asked how she challenges children, She said, "You know, we're not...we're not used to such a...such a wide range, so...so it is kind of hard, because you have to be careful that you're.... You know, you could be challenging a four-year-old, and then the two-year-old, you know, is not gonna be interested (AL, 01/02/97, p. 18)." For her, to provide appropriate challenges for children with age differences is a challenge.

Julie, on the other hand, did not worry about the age difference in her mixed-age class. She felt that it is more important to look at children's real developmental levels than their age levels. When asked how to make sure that what is going on in her classroom is developmentally appropriate, she answered:

> Uh, I think because I've studied development, but I also know my children. You know, I really observe my children and watch my children. And when you.... So many early childhood educators now are thinking...are thinking that development and curriculum could be two years either side of their chronological age. You know, you can meet all the needs of the kids in the classroom. I think the best way of making sure that it's appropriate is just observing your children and knowing where they are developmentally and going...going in that direction. And I think that's why we do the observations in the classroom. (JA, 01/07/97, p. 7)

What is the difference between Amy and Julie in terms of their use of knowledge of child development and learning? Amy tends to focus on the differences among children of

different ages; Julie, however, tends to focus on the similarities. When working with children, Amy is more concerned about how to provide various learning experiences that can meet the children's needs based on their age differences. In contrast, Julie pays much attention to the common characteristics across ages. She tries to provide interesting activities that can attract children at different age levels. As a result of this difference, in approach, children in Amy's group have more opportunity to engage in activities that are created according to their age levels, but in Julie's group, children seem to explore their own limits from what is available.

To teach in a multiple-age classroom poses a different challenge than does teaching in a single-age group. One important message from the NAEYC guidelines is that children within an age range share several developmental interests and characteristics. More discussion is needed on the issue of how to deal with age difference in mixed-age group.

A norm of child development. Experienced teachers seem to have a concrete picture of the norm of child development and learning that is established according to their teaching experience. They tend to compare children with those of other years. "This year is different" and "She makes me think about a child several years ago" are some of the statements that teachers made. Margaret, speaking about the children this year, saw them as more challenging: "We've never had a group like this as far as I know (MA, 01/17/97, p. 3)." "This year we don't have as many kids who are at that point of development yet. It goes from year to year (MA, 11/26/96, p. 2)."

Readiness. Knowledge of child development and learning also helps teachers to prepare children ready for the next developmental stage. In this study, only Amy did not place strong emphasis on the issue of readiness. Because she used to teach three-year-olds, she said, "[before] the kids in my class would go from my room to a four-year-old group, I really wasn't, you know, aware of what was needed for kindergarten (AL, 01/02/97, p. 16)." She viewed development as a natural thing that occurs when the time

comes. From her point of view, every child should be ready, at least socially, before entering kindergarten.

Margaret, by contrast, was deeply concerned about the children's readiness. During the course of the study, she mentioned several times about her concerns for several children who were not mature enough for the coming year. From her point of view, it is the responsibility of preschool teachers to help the children achieve a certain level of development so that they are be able to succeed in the following year:

> Our goal is when those kids who are five to really... their behavior should be manifested and a lot of our five-year-olds are doing that... Daniel . . . is really five... but he has trouble in sitting in circle and he likes to get others laugh by using inappropriate language. So we are in the process to let him know that his behavior is not appropriate. . . In older four you sometimes have kids who are... ready... almost... to some of the demanding aspects of pre-ac... and we don't do pre-academic but... in term of just how long to stay in project and how easily to move from one center to another and how they will... when it is time to clean up, even if they don't want to clean up, they will pull themselves together for that and make a game of it... (MA, 11/26/96, p. 1)

> We're really trying to help these kids to focus on those few minutes and try to reinforce and model and help them control themselves. . . . We have a lot of kids who have a lot of trouble just taking a deep breath and settling in. And they're loud enough and big enough so pull in other children. (MA, 01/17/97, p. 2)

> We're working on it because we do feel it appropriate at this time of year for them to be able to sustain a short ten-to-fifteen-minute period of time because that's going to be an expectation for kindergarten. Without belaboring that fact with them, we're more likely to say, "This is great. You kids really look like you're ready to sit even longer, or next year, the kindergarten teacher is going to be so pleased to see how well you can listen. To help them understand that they should feel proud when they can do it. We're both happy. (MA, 01/17/97, p. 3)

A similar concern has been expressed by Jean when she talked about a child with developmental delay. Because the teacher did not pay attention to his problem and did not provide some necessary assistance for the child and his parents, that child ended up being sent to special education. Jean thought that if preschool teachers did not help

parents deal with their children's developmental problems early enough to avoid further difficulty, the children would be the losers. Therefore she insisted that she was alarmed at the situation of children's development and was honest and supportive to parents when necessary.

For Florence, it was another story related to her child. When her child was in preschool, she was a little delayed in reading. The teacher, however, told her not to worry too much and said her daughter would become a fine reader. Florence has learned to "have faith in children." She said,

> Sometimes children have a problem and they're not going to learn to read unless you help them especially, but.... And that teacher I know missed a child like that. She was not perfect but, um, it's important to have faith in the development of children and to give them time and not be pressing on their backs all the time, you know. (FL, 12/10/96, p. 4)

However, Florence also has a time line for children's development. She wants to prepare children for the next stage:

> But there are also times I want to teach them to sit and listen for a certain period of time, and they will need to extend that period longer and longer every year they're in school.. . . And they need to learn to control their impulses. Some children need it much more than others, but they all need it, and they need to learn to speak rather than solve a problem with physical force, and to put together those important sentences asking for things they want, and negotiating with other children, so those are individually greater needs for some children, but they're needed by every child here. (FL, 12/13/96, p. 23)

The use of knowledge of child development and learning is situated. The challenge for teachers is not what to know but how to apply the knowledge. They do not want to be too nervous and push children's development too hard. But neither do they want any child to be missed. For the most benefit from the use of this domain of knowledge, more conversations among early childhood professionals are needed. To engage in various case discussions is one way for teachers to sharpen their judgment.

Product could be important, too. One criterion for a good teacher, from Jean's perspective, is to "be more interested and spend more time focusing with the child on their process rather than how it comes out, or the product (JN, 01/08/97, p. 4)." Yet she also pays attention to the teachers' reactions to a product." When planning activities, she thinks about the process. For instance, if she plans a clay activity, she would ask herself: "What they did with the clay with their hands?" "What did they talk about when they played with the clay? The product -- what the figure looks like when they are done -- has less importance to her.

But the product might provide some information about the children. She tried to clarify the values of the process and the product in her teaching:

> I can see children that, for instance, can draw very well, can draw figures well, can draw flat -- whatever they draw. And I look and I think to myself that child's pretty advanced. But I certainly don't say, I mean, I certainly react to everybody's products the same. And so that I'm not disappointed if I don't... Now, if a child took three balls of clay and made a snow person or something and, you know, I would say to myself, "Wow." I wouldn't say it out loud. . . . it is important because I can base where a child's at on the product. Now, of course, you could see a delay in a child in terms of the product. And so, in that capacity, I guess it's important because it helps me see. And even watching the process helps me see. But I think, especially with all sorts of activities -- not just a sand table -- you know, what a child is doing and what a child is creating and what they go through to create these things is what's going to help them to learn and become a learner that enjoys learning. So I guess it's a little bit of both. (JN, 01/08/97, p. 4)

The attraction of real projects to children also shows the importance of the product to the children. One day the children in Margaret's room were busily decorating wagons for the Mardi Gras parade. Daniel said to Margaret, "Mrs. E., you need to bring your camera tomorrow to take pictures of us." The second day, when they were ready for the parade, he asked Margaret again, "Where is it? Go get it." He made Margaret go to borrow one. He said, "Well, we need it because we need pictures of what we've done." Margaret's interpretation is this:

> ...that gives you an indication of how he felt about the product. You know, at the point there was a process, but the product was validating for them. I mean, they felt important, and they knew that they were going to do something with it. (MA, 02/11/97, p. 4)

Margaret invited children to engage in several real projects -- e.g., shoveling snow, cleaning the outdoor storage room, and digging up worms for the toad. Margaret viewed the participation in real projects as empowering the children because "they're doing something that they have to be older to do (MA, 02/11/97, p. 4)." The process of involvement provides a good opportunity for learning varied things; however, the product of real projects makes the children feel good about themselves.

Goals for children's learning. Sharing a similar philosophy of educating the whole child with the guidelines for developmentally appropriate practice, these teachers hold many expectations for their children that draw upon their knowledge of child development. Yet they have different foci. These are some general goals for children in Florence's classroom:

> We try to enrich everyone's language. We try to enrich everyone's social skills. We try to enrich everyone's self-help skills for managing, getting the coat on, washing hands. And we try to enrich everyone's gross motor skills on the playground and inside and fine motor skills. (FL, 12/06/96, p. 18)

Florence and Margaret paid more attention to the physical development of the children than other teachers, perhaps because that was a point of emphasis in their school. When asked about the children's learning, Jean listed many things but focused on the social and emotional aspects:

> They're learning social skills. They're learning how to resolve conflict. They're learning how to work with other children, play with other children, how to negotiate. They're learning respect for each other. They're learning independence skills, which includes social things, includes self-help skills. Uh, they are-- they are learning, hopefully, to enjoy learning. They are learning to take part in the practice of learning. They're learning how to process and come up with conclusions of their own. They're processing and thinking so that they can come up with questions. Gosh, there's so much going on. They're developing physically,

> both large and small motor, obviously. They're developing language skills. Emotional sorts of things. Learning to verbalize feelings, and learning to accept feelings, learning how to work with those feelings. They're learning to do things, and they're learning, uh, gosh -- they're learning to trust in themselves to be able to either take risks or try things and know that if they don't get it right, it's okay. I mean, the list goes on and on. On, on and on and on. (JN, 12/11/96, p. 13)

The most important thing, from Amy's point of view, is to "help children to have good feelings about themselves."

> Q: What is the main purpose or the main goal you want to work on with them?
> A: I think for them, I think for the children--I don't want to say to develop their skills, 'cause a lot of...especially the parents, they concentrate too much on skills like being able to do things like their writing, you know, things like that. But I think children have to have a good feeling about themselves.
> Q: How do you help them to have good feelings about themselves?
> A: Um, well. . . um, working with what they like, um, um, remembering what level they are, so that they can, you know, succeed. Um, I think, uh, it kind of taps into the social...the socializing, um, because the age we have, for them the most important thing is their friends, you know. Um, usually, um, the biggest thing I help them with was, like, their...their conflicts, you know. (AL, 12/05/96, p. 6)

As noted in the earlier section, Margaret was concerned with the readiness of the children in their all areas of development. She understood that children have their individual differences; however, she did her best to promote the children's development so that they would not fail at the next stage.

Ideas emerge from the children. One aspect to look at whether a teacher respects the difference between individual children is to see how teachers allow ideas to emerge from the children and how teachers involve children in decision-making (Wein, 1995).

In the interviews, Amy mentioned several times that her plans followed children's interests. In practice, her teaching evolved in daily interactions with children. She was willing to adopt children's ideas. She referred to her curriculum making as "emerging" from practices.

From Julie's perspective, teaching had to be based on what was observed from

children. Instead of planning far ahead, Julie planned activities just one or two days ahead. She felt that fit better into children's needs and interests.

Jean, Margaret, and Florence have a curriculum framework that consists of themes or units, for each month or several weeks. While they were carrying out their plans, they allowed a wide range of flexibility for children to explore their own ideas. Within those frameworks, they modified their plans according to the children's needs and interests. For them, what has been planned points out a direction for the children and the teachers; what really has been done, however, depends on the children and the situations. They do not stick rigidly to their plans. Furthermore, they are willing to follow children's ideas.

Florence said, "I love to just see what comes from the children." She spent the whole outdoor time watching children play with mud and water. She stayed beside a group of children watching them to jump and slide down the hill. What is her role in children's play?

> I was staying there to help...help out with that issue of sharing the space, and I was trying to keep a low profile and not be too involved because they were so busy, so happy, and...and I like to just listen and see what's going on, but, uh, they needed an adult there. (FL, 01/30/97, P. 17)

The following is an example of the teachers' thinking processes when they try to follow children's ideas.

The Stage

One day, at the end of snacks, one child picked up a cardboard tube and said, "Doo, doo, doo, the show's about to begin, the show's about to begin." And then two or three children got cardboard tubes. "The show is about to begin. The show is about to begin." So Florence said, "Well, let's see what happens." Then the children set up several big blocks to make a floor, to make a stage. Florence thinks, "Well, this is interesting. We've had the same castle for weeks and weeks, this is something different." She runs through her thought, "I've done this before--set up chairs and had a puppet theater and things like that and so.... Should I bring out puppets?" And then

she says to herself, "No, let's just see what the kids do."

The children stand up on the stage. They've set up chairs for the audience. Then they stand up there. They want to do a show, but they are not very organized. At first, they start bringing a lot of toys on the stage and dumping puzzle pieces. Florence says, "No, no, no, you can't do that. Time to clean up the stage and start over." Florence stays there and facilitates.

One child brings over a piece of paper, and they pretend to read from it. Another child scribbles something or draws something, and that is his work for the show. Florence tells some children who need suggestions, "Well, let's do something you all know, sing a song," Some of them sing a song. The audience applauds. Florence thinks, "They've had a lot of cute ideas."

Paul is good with language. He has stood up there and told a story. He's reading a story from a blank paper! He says, "Elias sits there with all her toys, but not a soul to play with."

Florence added the curtain to this stage. "Mostly they just sort of stand there," she said. "I want them to understand that you get ready and then you perform." Now, that doesn't work, of course, but she tries to introduce that idea. Holding back other suggestions, she decides to give children more time to try their own.

What does Florence like about children's play with this stage? van Manen (1990) says, "a teacher's eye is first of all trained by a pedagogic orientation (p. 137)." Florence watches their play with a pedagogical interest:

> You know how often when they're the audience they make noise, they.... You know, at music time they don't always behave very well, and even at circle time, and this is an experience for them to be up front, and they want the audience to listen to them, and they want the audience to clap, and they want the audience to be paying attention, and they want good manners from the audience, and they have even gotten up on that stage and told the audience the rules! "Now you be quiet," and.... so it's empathy, right? It's being in the other shoes, being in the other position, being in Mrs. Cranes's position, you know, when she's doing a music lesson, and so I just love that part of it. (FL, 01/30/97, p. 13)

Also, Florence saw it as a good opportunity for children to learn language, especially

when she saw Charles, one of her children with language difficulties, getting up with a story. She commented, "It wasn't a story, but it was several phrases, and there he was telling the audience."

Knowledge of Individual Children

The five teachers in this study are aware of the differences among individual children. Their knowledge of individual children influences their selection of curricular activities and makes them flexible in implementation. For instance, Julie has used toy trains as a tool in art projects because she has a child whose only interest was in playing with trains. Therefore, she created activities based on his interests and tried to guide him from one play area to another. When asked about conducting specific activities, all teachers want to keep some degree of flexibility according to the children's developmental levels. As Jean said, "Children need different things."

Providing as many choices as possible is another way for teachers to meet children's individual needs. For the use of materials and environment, children in these five classrooms have many choices, in either centers or activities. In addition to free-play time, the choices are available for most of the day in all contexts within the centers. For example, children may have choices on when to eat their snacks, with whom to sit for snack or lunch, when to do projects, and how to participate and contribute to the group.

However, there are times when teachers feel a need to say, "This is not a choice," especially when things related to safety or violated educational purposes. For example, when Jean took her children to the tennis court away from the school, she asked the children to follow her direction and stop where she felt it was needed. At that time, she was rigid in her requests. When Margaret saw a child running away from a teacher who was giving him redirection, she stopped that child and said, "Never run away from your parents and teachers because they care about you and have important things to tell you."

In a developmental program, it is necessary for teachers to provide choices for

children in different contexts and within different time frames; however, the challenge is how to draw a line between choice and not-a-choice.

Individual needs in the group. When a teacher is with a group of children, how does she meet the children's individual needs? Florence said, "You just see what you have and you work on what you need to work on (FL, 12/13/96, p. 22)." Based on the understanding of their individuality, Jean sought to provide the children with varied materials, stimuli, information -- whatever they wanted. Jean did not force any children to do anything beyond their developmental levels. From Jean's point of view, how children can best use the environment or materials depends on where they are in development:

> It's where they are, where their strengths are, getting them up to where their strengths are, getting them up to make their strengths stronger, and getting them up to the challenging, perhaps, areas in which they need to grow. But, doing so in a way that they are basically successful in their endeavors, not going beyond so that they're not successful. (JN, 12/18/96, p. 4)

Jean said her goals are to enhance the children's strengths and remedy their weaknesses, to allow every child to succeed. Therefore, she modifies her teaching and expectations depending on whom she is working with. Because her expectations for each child are different, she is more concerned with the process than with the product. From her point of view, every product is gorgeous and wonderful because it is what children went through.

How to take care of children's individual needs in a group situation is always the primary concern of Florence's teaching. In the setup of the classroom, for example, she tries to provide a personal space for individual children and at the same time create the sense of community. After children become used to the classroom routine, she sets up cubbies with children's names and stickers on them. I am surprised at how much Florence put thought into the use of cubbies and stickers:

> it's also for social interaction . . .. they can give things to another child, put it in their cubby. When they can help the teacher, I can say, "Would you put this in Ann's cubby, please?" Uh, the cubbies also allow, if they have an art project that

> takes two days, we can say, "Put this in your cubby. We'll do the rest of it tomorrow." Or, if I have to interrupt them, if they're drawing and it's clean-up time, I can say, "Just put it in your cubby and you can finish it later," or "You can finish it tomorrow." . . . . It helps them want to make something very fancy and special and put a lot of effort into it if they know they can keep it for a little while, and they can show their friends this cool thing that they made. So, those are the reasons we have the cubbies. (FL, 12/06/96, p. 8~9)

The regular use of a personal cubby showed Florence's sensitivity to the children's need for ownership, to be respected for their work, for their emotional and social needs. The cubby, from Florence's point of view, gave children a sense of being in a community and belonging to this classroom. "It's a visible symbol of our community," Florence said.

Margaret was aware that she had a very different group this year. She said several times in interviews: "if they are separated into different classes, it would be easier." However, the fact is that she has to deal with several challenged children in the same group at the same time. She said,

> With our cl[illegible] this year, that is our challenge right now is to figure out how to take these children. I think if they were separate, then they would be a lot different than they are when they're together. I think we have some of the chemistry that isn't great for different kids, and we're trying to figure out how...how to rearrange, restructure, the classroom, and whether we need to do behavior modification with any of the children, and what sort of ways to do that just to try to bring them up a step in terms of their ability. For a lot of them it's just for self-regulation kinds of issues. (MA, 12/10/96, p. 7)

The component of group members appears to have an impact on children's behavior. During this school year, Margaret had spent most of her energy figuring out how to meet the needs of several challenged children at the same time. For example, she described one of her challenges as follows:

> Daniel. . . . A lot of children just adore him, and whatever he does they do as soon as they can. He's aware of that power. . . Yesterday, we talked a lot about whether there weren't ways that we could get him to be more consistent in his ability to come in and figure out where to put himself. . . . So we're...we're trying to figure out ways to get him to focus on activities and hope that he can sustain it there for a while. And then, at the same time, help him monitor his mouth. He is a little

> impulsive. I mean, he...he is full of love and full of good will, but he doesn't always.... He doesn't think always, or if he does think, he has to think like "I can't do this right, it's not the right thing." And so we're thinking to work through him. (MA, 12/10/96, p. 7)

Basically, Margaret's concern about Daniel is from the standpoint of readiness. The goals she had set for him, such as "to sit still in circle time for a while," "to keep his voice down," and "to be organized," are the kinds of goals to prepare him for the next stage. Are these goals necessary to worry about for teachers of four-year-olds? From the developmental perspective, they might not be; however, Margaret was concerned from the point of view of social norms and parents' expectations. These goals became important to achieve. Are these goals developmentally appropriate or inappropriate? The answer was not easy to find.

Because children's needs vary, teachers might feel uncertain in the beginning of the year:

> We're also trying to figure out whether it's our...how the children are responding to our program and whether we have to do a lot of changing. We didn't know how that play was going to work out today, we really didn't know whether the kids were going to, one, want to do it, and, two, be able to do it, or, three, you know, keep themselves together because it takes a lot. . . . We didn't know whether we would.... We didn't know whether it would be disaster or not. We didn't know whether Daniel would just get silly. (MA, 12/10/96, p. 7)

Sensitive to individual needs. Based on the knowledge of child development and learning, teachers have a general understanding of what curriculum is good for children. For example, most of the teachers include food, seasons, animals, family, and friendship in the curriculum. Yet they have different principles governing their arrangement of the sequence of curriculum contents. One common principle is to be aware of individual children's needs.

"Hospital" is a common theme in dramatic play. When there was a child whose mother went to the hospital for treatment, Florence decided to choose "hospital" as the

theme of dramatic play in that period of time:

> We chose hospital first because one of our children, her mother is very ill and is going to have a serious operation on her. . . . And I know it's affecting this child. And we wanted to give them a chance to be familiar with the ideas of a hospital and, uh, some of the tools and have it not be a fearful experience. And give her a chance to talk with us and play being the doctor and play being the person who needs help. We thought that would be good for her. (FL, 12/06/97 p. 14)

And, as a matter of fact, this curriculum decision satisfied both the children and the parents.

Children's needs change over time. In February, Margaret found that several older children became somewhat bored in the playground. She kept thinking about some ideas to invite children to engage. Although she has rich curricular ideas from her teaching experience, every year children have their individual needs. To meet their needs is a continuing challenge for her.

Children with special needs. The law requires all centers to accept children with special needs in regular preschool classrooms. The revised DAP guidelines also agree upon the concept of "full inclusion" that asserts that "young children with disabilities are best served in the same community settings where their typically developing peers are found" (Bredekamp & Copple, 1997, p. 4). How do teachers think about working with children with special needs, and how do they modify the curriculum to meet the needs of all the children?

Teachers spent a great deal of time learning about the children with special needs before they could develop a curriculum to meet their needs. This year, four children who need extra care were assigned to Margaret's class. During the course of the study, Margaret spoke at length about the challenge of figuring out what they need and how to help them engage in activities. For example, Margaret told what she learned about Joseph:

> Joseph-- because we're trying.... We never know how much rope and space to

> give him because he...he has a lot of trouble conforming and keeping his body organized. But on the other hand, he pushes limits a lot, so we're trying to figure out where the balance seems to be. (MA, 12/17/96, p. 8)

Jean agreed with the idea of including children with special needs; however, the children's greatest benefit was her primary concern. She would suggest that parents pursue additional professional assistance in addition to the regular setting. From Jean's perspective, a child care center is not a professional place designed for children with special needs. To include all children is good; but, being a professional, she thought that teachers should be able to say no when a child with special needs cannot receive the best help in her classroom. For instance, once she had a child who did not communicate with the teachers at all. She did not think that she was able to work with a child like that. She said, "We need to recognize our limitation" (Field notes, (12/18/96). Under this circumstance, she suggested that the parents find a better center for the child.

What are some of the principles applied by the teachers when they deal with children who have special needs? Jean talked about the importance of letting children trust in her when she worked with a child with special needs:

> George is challenging . . . . And so George's response to direction with his teachers here is often to shut them off. . . . And so that it's hard to reach him. It's hard -- it's hard to use and say what we usually say with children, with all the children, it's very hard for us to connect with him that way. Uh, and what we do -- what we're working on now -- there's a couple of things -- is, uh, being sensitive and calm with him no matter what he does, so that he learns to trust us and learns to understand and trust that no matter what his behavior is, we will never say anything negative about him and we will always be there to help him. And if he does do something, if there is some behavior that's inappropriate, he's going to understand that it's the behavior we don't care for. But, we still care for him. (JN, 01/08/97, p. 7-8)

To establish a trusting and loving relationship is the first thing teachers want to do with all children. Establishing this kind of relationship is especially challenging with children who have special needs. Sometimes the teachers may feel that they need to pull themselves away from this child for a while. Jean said about her feeling about to have "a

break" from another child with special needs in her class:

> You know, sometimes if I'm... I feel like I need to be away from a child. . . . I just need a break from him. . . . Actually, he wasn't too bad today. But you're constantly going with him. I mean, you have to be on...on... on call 24 hours with him. . . . [Although I am] still understanding everything that's going on with him, sometimes it just is so hard to watch him moan, and groan, and be angry. It's just hard, and you have to walk away. It's very intense. (JN, 02/28/97, p. 1)

Similar negative emotion appears in all the teachers who have children with special needs in their classrooms. At such a time, the understanding and support of the co-teacher is very important.

Ignoring children's inappropriate behavior or taking attention away from them is another strategy used by the teachers. For instance, Jean found that the more she paid attention to George's behavior -- at wake-up time for example -- the more it became a game for him, and the more he pulled and extended. After trying different strategies and observing the child for one month, she decided not to give him that much attention. From then on, he began to behave better. How much attention to give to children with special needs is a matter of the teachers' deliberate choice. Understanding that Ann, a child with special needs, acted to draw the teacher's attention, at circle time, Florence asked Ann to sit on her own seat pad rather on the teacher's lap:

> I'm not happy to have Ann on my lap because she has acted up to get my attention, and now the only way I can proceed is to pay special attention to her. I want her to be able to be part of the group. (FL, 01/10/97, p. 39)

Furthermore, Florence discovered that when she paid special attention to Ann, the child found it harder to engage. For instance, Florence went to the science class with the children. She decided not to sit beside Ann but sat a short distance away. Finally, she found that Ann could participate very well without her extra attention.

One day, when the children with special needs were not in the room, was a

relaxing day for Jean. She decided to "have a very flexible 'go with the flow' day" (12/18/96, p. 1) because when they were here, "I just can't enjoy them because I'm so busy managing some of their behavior." She said, "Some of the children that are more, um, a challenge were not there, so I didn't have to really spend a lot of energy on that. I was able to spend some energy and have some fun time with the children that were here" (JN, 12/18/96, p. 1).

To include children with special needs is a continuing challenge for teachers, who must face many unpredictable and widely varying reactions every day. Margaret said that she liked both the physical and mental challenge in preschool. However, she also said several times that "we are not able to ..." because she needed to modify her curriculum according to the children's special needs.

Conversely, some of the teachers just treated these children no differently from other, more typical children. For instance, a child with little English received little or no additional assistance in one of these classrooms. The teacher thought that the child would pick up the language gradually, but he was having trouble expressing himself to both the teachers and the other children. After a month, he became an "aggressive" child in the classroom. However, it seemed clear that he was trying to draw others' attention as well as to communicate with others. A similar case occurred in another classroom, but, instead of being aggressive, this child seemed to be withdrawn. The kind of "difference blind" or what is called "culture blind" -- did not help these children to progress. Finally, each of these two children either went home and stayed home, or moved to another school, where the teachers spoke his language. The teacher thought it was a better choice for him, yet she did not realize what she was missing in this child's learning. These children might be able to connect themselves to others if the teachers were sensitive to their needs and provided additional guidance.

Jean saw the importance of understanding how family dynamics affect a child and family. Since the goals of both the teachers and the parents are for the good of the child,

Jean believes she has to be honest with parents, in a non-threatening, caring, and supportive way. She shared with me a story about a boy who had a language problem since the age of two-and-a-half. His teacher had ignored the problem, and the child ultimately was enrolled in a special education class. Jean thought that the teacher should have helped the parents to identify the problem early enough to avoid further difficulty. Although it is sometimes difficult to discuss children's problems with their parents, Jean asks herself, "If I'm not honest with parents, who loses? The child." Therefore, she thinks her role is to be supportive of parents. She is empathetic and sensitive to their needs and their concerns, from both points of view, hers as a professional and theirs as parents. It is necessary to understand what is best for parents, as well as what is best for the child. "It's the way you work together with parents so they're not as frightened by it," Jean said, "[let parents] feel like... they have someone with them on the journey" (JN, 02/20/97, p. 20).

Knowledge of the Social and Cultural Contexts

In response to critics of the original DAP guidelines (1987) as demonstrating a lack of cultural sensitivity, use of the knowledge of the social and cultural contexts in DAP is emphasized in the revised DAP guidelines (1997). On the basis of these principles, the DAP document asserts that "development and learning occur in and are influenced by multiple social and cultural contexts_ (p. 12). Children's exposure to social knowledge, including "the vast body of culturally acquired and transmitted knowledge that children need to function in the world" (p. 13), is as important as their exposure to physical knowledge. Attitudes toward a community of diversity are an evolving issue in the United States. Since a mixture of children from different cultural and linguistic backgrounds is a fact in many classrooms, for the teachers to make the curriculum "meaningful, relevant, and respectful for the participating children and their families" (p. 9) becomes an issue of multicultural education. As the revised DAP (1997) stated,

"practices cannot be developmentally appropriate unless they are responsive to cultural and linguistic diversity" (p. 4).

Aware of the importance of cultural and social contexts to children's development and learning, what should teachers do in their curricula? According to the DAP guidelines, teachers do not have to know every culture, but they do need to realize how their own cultural experience shapes their perspective. In addition, they are urged to consider multiple perspectives when making decisions about a child's development and learning (Bredekamp & Copple, 1997).

Teachers' use of their social and cultural knowledge is revealed in their daily interaction with children from different cultural backgrounds and their decisions regarding curriculum that relates to holidays and other aspects of different cultures. How teachers deal with holidays reflects their sense of the culture of the community; however, the ways in which they teach cultures other than their own reflect their sense of the broader society.

Summary and Suggestions

This paper presents a narrative analysis of the implementation of DAP from the teachers' perspectives. It supplements the studies of early childhood curriculum by including teachers' perspectives in the course of conceptualizing appropriate curricula for young children. The analysis of how teachers understand, conceptualize, develop, and implement appropriate curricula suggests a modification of the teachers preparation and training programs to help prospective and in-service teachers learn about the process of developing and making curriculum decisions. The stories of five teachers' curriculum making in this study may serve for case studies.

The model proposed in this paper is based on a close inquiry of five experienced preschool teachers' curriculum making practices. The finding of the study indicates that

developmentally appropriate practice is situated. The making of a developmentally appropriate practice involves complicated decision-making processes and judgment of what is good for the children based on knowledge and experience. Following are some issues significant in the processes of creating developmentally appropriate curricula.

Issues

The use of knowledge about child development and learning. Knowledge about child development and learning provides theoretical support for and informs these teachers' decision-making in terms of setting goals, diagnosing needs and interests of the children, and consulting parenting. A norm of child development, which is questioned by Hamm (1989) and Kessler and Swadener (1992), was referred to by four of the five teachers when making judgments about the children and the appropriateness of the curriculum. The fifth teacher also reported relying on developmental theories to inform her practice; however, she was also aware of the problem of setting a norm for all.

Notion of readiness. The notion of readiness is frequently associated with developmentally inappropriate practices (e.g., Graue, 1993; Smith & Shepard, 1988) if it pushes the teachers to work only on preparing the children for the next stage of development. In this study, two teachers expressed concerned about children's readiness, especially close to the end of the school year. They tried to help children, for example, to be able to stay in the group productively at circle time for two reasons: the developmental tasks and preparation for kindergarten. But the other three teachers seemed not to worry about it at all. Are the two teachers who care about children's readiness implementing less appropriate curricula than the curricula made by the other teachers? What does the notion of readiness mean in DAP curriculum? These questions arise from this study.

Teacher's involvement. A commitment to teaching which focused on interactions or process was evident in these teachers' curriculum thinking. Parallel to the notion of learning through process was these teachers' emphasis on the importance of interacting with the children throughout the day. All five teachers were child-centered when they interacted with the children; however, the degree of involvement in the children's learning process varied from one teacher to another. This finding brings up the issue of the teachers' role in children's learning. These teachers differed in their thinking about how much and what kinds of guidance to give to the children during their learning process.

The source of knowledge of individual children. Teachers' knowledge of individual children was based on their observations and interactions with the children. Because every year the children are different, these teachers did not implement an identical curriculum each year. Instead, they modified the curriculum according to the characteristics of the children.

The importance of teacher observation of individual children as a basis for curriculum decisions, from Wien's (1995) view, is an aspect of DAP unfamiliar to teachers. In this study, systematic observation was not observed in these classrooms. While teachers talked about learning about the children by observation, they also talked about not having time to observe children. In spite of their understanding of the importance of observation, these teachers had not found a way to incorporate it as part of their regular activities. This issue is still a challenge to the teachers.

Working with children with special needs. Teachers' attitudes toward working with children with special needs are different and depend on the school policy. The Grace

Nursery School promotes the inclusive policy; therefore, Margaret and Florence were able to receive more professional and emotional support from the school. They spent a great deal of time in helping these children individually. However, when it is not a school-wide effort, teachers may not be able to work on these children's individual needs. Teachers may assume that a child-centered environment is enough for all children, including children with special needs. Based on my observation in these classrooms, children with special needs did not automatically succeed without extra assistance.

Insufficient knowledge about children's social and culture contexts. The domain of knowledge about the social and cultural context is new in the revised DAP guidelines. It also appeared to be new to these teachers. The guidelines suggested that the teachers use knowledge of the social and cultural contexts to "ensure that learning experiences are meaningful, relevant, and respectful for the participating children and their families" (Bredekamp & Copple, 1997), p. 9). When asked about children's learning in the social and cultural contexts, teachers tended to associate it with cultural differences or the learning of various cultures. This finding suggests that the teachers knew little about how the social and cultural contexts relates to children's learning and development. When dealing with the issue of cultural differences, the teachers tended to seek help from the parents. The degree to which the curriculum reflects the social and cultural context varied from one classroom to another.

The multicultural sensitivity which is one important component of DAP classroom was more likely to be found in materials rather than in interactions. Two of the five teachers used the notion of multicultural education but in different ways: one focused on cultural learning and another one focused on celebrating differences. Another teacher

has done a little bit both. The other two teachers did not put extra emphasis on this issue.

Suggestions for Teacher Education and Professional Development

An alternative for teaching about curriculum planning. Often teachers are trained in their preparation programs with the linear model of planning which is, actually, seldom found in these teachers' practices. Not only did these teachers talk about the uselessness of the traditional planning strategies taught in the teacher education program, but they also encountered the same problems with new teachers or student teachers, or in continuing learning courses. To better prepare teachers as curriculum makers, a change in developing new teachers' ability to plan curriculum is called for.

Based on the experiences of the teachers in this study, it is suggested that teacher preparation programs create more opportunities for practicing sensemaking of situations, making judgments, and discussing the possible choices in various situations. These procedures would replace the use of a linear model, such as writing behavioral objectives. Case studies which are written according to real classroom situations, for example, may be helpful in creating opportunities for sensemaking, practicing judgments, and making choices.

Reflection on personal experience. An examination of teachers' thinking processes indicates that curriculum making and teaching relates to the teachers' experiences -- e.g., childhood experiences, parenting experiences, experiences of being students, and experience of teaching other children. The more teachers understand how their personal experiences function in their teaching, the better they are able to use their personal experience to improve their teaching (Clandinin & Connelly, 1995; Schubert &

Ayers, 1992).

Learning about how and why. To conduct an act of teaching, teachers draw upon different sources of knowledge to support their choices. In addition to what knowledge to use, teachers have to determine how and when to apply different domains of knowledge. For instance, a teacher may impose child development theories on children from minority cultures, thus expecting their behavior to be the same as others from the majority culture. Based on what has been learned from the five teachers in this study, it appears that teachers need to develop the ability to make judgments and choices appropriate to specific contexts. How to turn teacher preparation programs from the focus on knowing what to the focus on knowing how and why needs further effort.

Suggestions for Further Study

Search for knowledge of the social and cultural contexts. The three domains of knowledge -- knowledge of child development and learning, of the individual children, and the social and cultural contexts -- provide a professional knowledge base for teachers' decision-making. But sometimes these three domains compete with each other.

Regarding the debate about what sources of knowledge are important in the development of early childhood curricula, these five teachers mainly relied on their knowledge of child development and learning for making judgments about what is appropriate for children's learning. When knowledge of the individual children was available, they modified the implementation of curriculum to meet individual children's needs and interests. Often their understanding of individual children was guided by their judgments of the individual children's needs and interests compared with a norm derived

from developmental theories and teaching experience.

These teachers were aware of the cultural differences in a diverse society, yet only two of them intentionally included the issue of difference in their curricula. One focused on the learning of different cultures, and one focused on the celebration of difference. Both actions occurred as a result of their personal experiences and interests.

The knowledge of how social and cultural contexts influence development and learning, however, was not brought up frequently by the teachers. Compared to the tradition of child developmental theories, the body of knowledge about the social and cultural contexts is new to many early childhood professionals.

The importance of culture in children's development and learning was recognized by the teachers, yet the kind of influence and how culture functions in children's learning and development are still unknown. Further studies are needed to explore the various aspects of the cultural and social impact on the education of young children. More case studies may be useful in helping teachers learn about this domain of knowledge.

Observation toward understanding. The five teachers all claimed that they are developing curricula in response to individual differences. However, they also talked about having no time for observing children. Systematic observation seemed impossible in the actual teaching situation and there was no evidence of it in the class sessions I observed. How do teachers come to the understanding of the children in their classrooms? Do teachers arrive at an understanding of the children based on observations and authentic evaluation? What are effective observation techniques that will help the teachers become better observers to learn about the children systematically? More studies are needed to explore these questions.

Authentic Evaluation of DAP

Curriculum making was an on-going process that involved both the children and the teacher in defining direction. Rather than a set of curriculum plans to be implemented, these teachers developed the draft of plans with varied possibilities. Words used by these teachers such as "trying things out," "See what will happen," and "Let children discover," showed that these teachers did not have a destination for children's learning when they planned a curriculum.

It is also apparent that these teachers engaged in more reactive and post-active thinking processes than a pre-active thinking. Frequently, they were dealing with how to react in unpredictable situations rather than in expected situations. If we only look at the outcome of what the teachers did in the classroom, we may not realize the reasons that went into the development. Or we may sometimes question, "Is this a developmentally appropriate curriculum?" However, through in-depth, continuing conversation with the teachers, their thought processes revealed the complicated decision-making processes of creating developmentally appropriate practices.

An outsider evaluator may bring an ideal image to evaluate the classroom without taking into account the situations and teachers' thought processes. It is suggested that further studies be done to evaluate the implementation of DAP by engaging in conversations with the teachers rather than using a match-or-not rating method.

Reference

Bleeker, M. T. (1992). Kindergarten curriculum: Teachers' beliefs and practices. Unpublished doctoral dissertation: University of South Dakota.

Bredekamp, S. (Ed.) (1987). Developmentally appropriate practice in early childhood programs serving children from birth through age 8. Washington, DC: National Association for the Education of Young Children.

Bredekamp, S. (1991). Redeveloping early childhood education: A response to Kessler. Early Education & Development, 2(2), 199-209.

Bredekamp, S., & Copple, C. (1997). Developmentally appropriate practice in early childhood programs, revised edition. Washington, DC: National Association for the Education of Young Children.

Cassidy, D. J., Buell, M. J., Pugh-Hoese, S., & Russell, S. (1995). The effect of education on child care teachers' beliefs and classroom quality: Year one evaluation of the TEACH early childhood associate degree scholarship program. Early childhood Quarterly, 10, 171-183.

Charlesworth, R., Hart, C. H., Burts, D. C. & Hernandez, S. (1991). Kindergarten teachers' beliefs and practices. Early Child Development and Care, 70, 17-35.

Charlesworth, R., Hart, C. H., Burts, D. C., & DeWolf, M. (1993). The LSU studies: Building a research base for developmentally appropriate practice. Advances in Early Education and Day Care, 5, -- Perspectives in developmentally appropriate practice (pp. 3-27). Greenwich, Connecticut: JAI Press Inc.

Charlesworth, R., Hart, C. H., Burts, D. C., Mosley, J. & Fleege, P. O. (1993). Measuring the developmental appropriateness of kindergarten teachers' beliefs and practices. Early Childhood Research Quarterly, 8, 255-276.

Clandinin, D. J., Connelly, F. M. (1992). Teacher as curriculum maker. In P. W. Jackson (Ed.), Handbook of research on curriculum (pp. 363-401). New York: Macmillan.

Connelly, F. M., & Clandinin, D. J. (1988). Teachers as curriculum planners: Narratives of experience. New York: Teachers College.

Cornbleth, C. (1990). Curriculum in context. New York: Falmer.

Dunn, L., & Kontos, S. (1997). What have we learned about developmentally appropriate practice? Young Children, 52(5), 4-13.

Glesne, C., & Peshkin, A. (1992). Becoming qualitative researchers: An

introduction. New York: Longman.

Graue, M. E. (1993). Ready for what? Constructing meanings of readiness for kindergarten. New York: State University of New York.

Grundy, S. (1987). Curriculum: Product or praxis? New York: Falmer.

Hamm, C. M. (1989). Child-centered curricula. In C. M. Hamm, Philosophical issues in education: an introduction (pp. 76-90). New York: Wiley.

Hyson, M. C., Hirsh-Pasek, K., & Rescorla, L. (1990). The classroom practices inventory: An observation instrument based on NAEYC's guidelines for developmentally appropriate practices for 4- and 5-year-old children. Early Childhood Research Quarterly, 5, 475-494.

Lu, M. (1993). Early childhood teachers' beliefs and attitudes concerning developmentally appropriate practice. Unpublished doctoral dissertation: U. of South Carolina.

Manning, B. H., & Payne, B. D. (1993). A Vygotskian-based theory of teacher cognition: Toward the acquisition of mental reflection and self-regulation. Teaching & Teacher Education, 9(4), 361-371.

Rogoff, B. (1990). Apprenticeship in thinking: Cognitive development in social context. New York: Oxford University Press.

Schubert, W., & Ayers, W. (Eds.), (1992). Teacher love: Learning from our own experience. New York: Longman.

Shuster, C. (1995). Effects of inservice training on the developmental appropriateness in early childhood education programs. Paper presented at the American Educational Research Association Annual Meeting, April 18-22, 1995, San Francisco, California.

Smith, M. L. & Shepard, L. A. (1988). Kindergarten readiness and retention: A qualitative study of teachers' beliefs and practices. American Educational Research Journal, 25, 307-333.

Snider, M. (1990). The effects of specialized education and job experience on early childhood teachers' knowledge of developmentally appropriate practice. Early Childhood Research Quarterly, 5, 69-78.

Tyler, R. (1949). Basic principles of curriculum and construction. Chicago: University of Chicago Press.

van Manen, M. (1990). Researching lived experience: Human science for an

action sensitive pedagogy. Albany, NY: State University of New York Press.

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Cambridge: Harvard University Press. Kessler, S., & Swadener, B. B. (Eds.) (1992). Reconceptualizing the early childhood curriculum: Beginning the dialogue (pp. 149-161). New York: Teachers Coliege.

Wien, C. A. (1995). Developmentally appropriate practice in "real life": Stories of teacher practical knowledge. New York: Teachers College.

Wilcox, K. (1982). Differential socialization in the classroom: implications for equal opportunity. In G. Spindler (Ed), Doing the ethnography of schooling (pp. 166-187). Albany: State University of New York Press.